ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/98 Date Received: 08/13/98

Project: Metro Self Monitor, PO# M76905

Date Samples Extracted: 08/25/98 Date Extracts Analyzed: 08/25/98

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, ZINC USING METHOD 6010

Samples Processed Using Method 3005A

Results Reported as mg/L (ppm)

Sample ID		<u>Chromium</u>	Copper	<u>Nickel</u>	<u>Zinc</u>
M76905		0.54	0.29	0.59	< 0.05
Method Blan	a k	< 0.05	< 0.05	< 0.05	< 0.05

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/98 Date Received: 08/13/98

Project: Metro Self Monitor, PO# M76905

QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 808074-01 (Duplicate)

					Relative		
		Reporting	Sample	Duplicat	te Percent	Acceptance	
	Analyte	Units	Result	Result	Difference	Criteria	1
Ţ	Chromium	mg/L (ppm)	0.30	0.33	10	0-20	ļ.
	Copper	mg/L (ppm)	0.28	0.29	4	0-20	
	Nickel	mg/L (ppm)	0.30	0.30	0	0-20	
	Zinc	mg/L (ppm)	< 0.05	0.06	nm	0-20	

Laboratory Code: 808074-01 (Matrix Spike)

		Reporting	Spike	Sample	% Recove	ery % Recove	ry Acceptance	
	Analyte	Units	Level	Result	MS	MSD	Criteria	RPD
ų.	Chromium	mg/L (ppm)	5	0.30	104	103	80-120	1
	Copper	mg/L (ppm)	5	0.28	106	104	80-120	2
	Nickel	mg/L (ppm)	10	0.30	103	101	80-120	2
	Zinc	mg/L (ppm)	5	< 0.05	106	104	80-120	2

Laboratory Code: Laboratory Control Sample

	Reporting	Spike	% Recove	ery % Recov	ery Acceptanc	e	
Analyte	Units	Level	LCS	LCSD) Criteria	RPI)
Chromium	mg/L (ppm)	5	102	103	80-120	1	- 17 X
Copper	mg/L (ppm)	5	101	103	80-120	2	
Nickel	mg/L (ppm)	10	105	106	80-120	1	
Zinc	mg/L (ppm)	5	106	108	80-120	2	

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282

808045

MM 13 I 8/13.98 10:35 AM

SAMPLE CHAIN OF CUSTODY

Send Report To: Al ASKA		1/2-1				
Address 628 H	Anford Si	- COPER	7	Contact{	SERGED A. The	mpson
City, State, Zip Sente	e us	98134				
Phone # (206) 382-	2379	FAX # <u></u>	206) B	82-4309	Date 8-13-9	8
SITE NO.	· · · · · · · · · · · · · · · · · · ·	PROJ	ECT NAME	<u> </u>	PURCHASE ORDE	R#
7238		netro S	elf n	ponitore n	n 76905	
SAMPIERS (signature)		3 -	The Art of		PROJECT LOCATI	ON
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REMARKS				SA	AMPLE DISPOSAL INFO	
					Dispose after 30 da Return Samples Call for Instruction	* * * * * * * * * * * * * * * * * * *
Sample #	Date/Time Sampled	Type of Sample	# of Jars	Lab Sample #	Analyse: Requeste	
M76905 8.	-13-28,0:00A-	HZO	/	0/	CR CUK	1, 20
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Received by:						

FORMS/COC

08/10/98

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

August 27, 1998

DUPLICATE COPY

INVOICE #98ACU0827-2

Accounts Payable Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M76905: Results of testing requested by Gerry Thompson for material submitted on August 13, 1998.

1 water sample analyzed for Chromium, Copper, Nickel, and Zinc using Method 6010 @ \$65 per sample \$ 65.00

Amount Due \$ 50.00

FEDERAL TAX ID (b) (6)

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S.

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

August 27, 1998

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on August 13, 1998 from your Metro Self Monitor, PO# M76905 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Manuel Marti Project Manager

Enclosures ACU0827R.DOC